MODEL 600® REGENERATIVE AIR SWEEPER®
CNG AUXILIARY ENGINE/CNG CHASSIS

SWEEPER AUXILIARY ENGINE

Engine ............................................ KEM/GM Vortex 5700 CNG
Displacement ..................................... 350 in³ (5.7 L)
Power ......................................... 124 HP @ 2400 RPM (92 kW)
Net torque ...................................... 284 lb-ft @ 2100 RPM (385 Nm)
Air cleaner ..................................... Heavy duty, w/pre-cleaner, scavange vacuum hose, and in-cab air restriction indicator w/gauge.
Oil filter ........................................... Spin on, full flow
Auxiliary engine fuel rack shared with chassis
CNG fuel capacity .................. 60 DGE (227 DLE)
Auxiliary engine shutdown system
Fuel/water separator

BLOWER, RUBBER LINED

Aluminum alloy, high volume, open face turbine
Purpose ........................................... Creates blast and suction
Bearings ......................................... (2) sealed lifetime lube, anti-friction
Bolt-on housing ................................. Abrasion resistant, replaceable liner
Drive .............................................. Heavy duty power band

DUST SEPARATOR

Type ............................................ Cyclonic, multipass, centrifugal separation
Size .............................................. 20 x 61 in (508 x 1549 mm)
Located adjacent to blower within hopper
Particulate removal achieved through 61 in (1549 mm) skimmer slot into skimmer hood
Hinged inspection door opened from hopper exterior
Abrasion resistant housing w/replaceable wear resistant liner

HOPPER

Capacity (volumetric) ........................... 7.3 yd³ (5.6 m³)
Capacity (useable) .................................. 6 yd³ (4.6 m³)
Construction ..................................... Welded steel plate with integral stiffeners
Floor angle ...................................... 22°
Dump door opening ............................. 84 x 44 in (2134 x 1118 mm)
Dumping method ................................. Hydraulic w/raker bar
Dumping height ................................ 36 in (914 mm)

PICK-UP HEAD

Type .............................................. Dual chamber
Function ........................................... Delivers air blast and suction
Width (inside dimension) ............... 87 in (2210 mm)
Std. pick-up head area .................... 2610 in² (1.68 m²)
BAH® option area ............................... 3567 in² (2.3 m²)
Suction ............................................ (4) spings, 2 drag links
Skids ............................................... DUO SKID®, long-life carbide
Suction hose diameter ......................... 14 in (356 mm)
Pressure hose diameter .................... 14 in (356 mm)
Pressure bleeder ................................. Integral for leaf/light material pickup
Reverse pick-up head system

GUTTER BROOM, TWIN, Patented

Standard equipment includes floodlights and parabolic mirrors
Drive .................................................. Constant speed non-reversible hydraulic motor
Adjustment ........................................... Adjustable for down pressure, pattern and wear
Down pressure .................................. Automatically adjusts to requirement
Flexibility ....................................... All directions integral anti-damage “swing away” relief valve
Broom .................................................. 43 in dia. (1092 mm) steel wire, vertical digger

HYDRAULIC SYSTEM

Operates gutter broom(s), dump and pick-up head
Drive .............................................. Belt driven from auxiliary engine
Capacity ........................................... 8 GPM (30.3 LPM)
Reservoir ...................................... 25 gal (94.6 L) w/80 mesh suction strainer, sight/temperature gauge, cooler
Filter .................................................. 3 micron in-line

DUST CONTROL SYSTEM

Water spray nozzles for dust suppression
Pump ............................................. Electric diaphragm
Reservoirs .................................. Polyethylene 220 gal (833 L), total minimum
Filter ............................................... 80 mesh in-line
Low water shut-off .................................. Safety shut-off with low water warning light in cab coupled with liquid level sensor
Spray nozzles: Around pick-up head .................. 4
Gutter brooms (each) ......................... 1
Hopper (inside) ................................. 1
Hydrant fill hose w/storage area .......... 20 ft (6 m)

CONTROL SYSTEM

BlueLogic® Control System
Multiplexed electrical system includes hardware and TYMCO designed software that integrates the in-cab controls to the auxiliary engine and all sweeper functions; as well as provides intelligent safety features and on-board diagnostics (OBD) for the auxiliary engine and sweeper through the BlueLogic display.

BlueLogic Display
Pedestal mounted touchscreen display provides sweeper and auxiliary engine data to the operator and includes hour meters (trip and total) for the auxiliary engine, gutter brooms, pick-up head, blower, water pump, and BAH broom if applicable; sweeper odometer (records curb miles swept and sweeping hours), service reminders, custom reminders, overspeed warning, low water audible alarm, dust control system winterization guide, and OBD.

Interior Components
Leaf pressure bleeder control, BlueLogic display, auxiliary fuse panel, illuminated control switches: pick-up head, gutter brooms, auxiliary engine RPM, dust control system nozzles, safety lights.

Exterior Components
Dump switch, BlueLogic multiplex module

SAFETY/WARNING DEVICES

Alternating LED rear flashers (2)
Back-up alarm
SAE Class 1/California Title 13 amber beacon light with limb guard - LED

OPTIONAL EQUIPMENT

AOD water pump w/washdown hose/spray gun
Abrasion protection package
Auto Sweep Interrupt (ASI)
Auxiliary hand hose 8 in dia. (203 mm)
Auxiliary hand hose hydraulic boom assist
Auxiliary hand hose catch basin cleaning package
Auxiliary hydraulic system
Broom Assist Pick-Up Head (BAH®)
Camera/monitor system
COMDEX (extra water and tool box) 330 gal (1249 L) total capacity (171” WB Autocar chassis only)
Gutter broom height adjuster(s) (left, right, or twin)
Gutter broom variable speed
Gutter broom drop-down
High output water system
Hopper deluge system
Hopper drain system
Linear actuator - pressure bleeder w/gauge
(Standard on cabover chassis)
Liquid recovery system
Low emissions package (required for South Coast AQMD Rule 1186)
Magnet, light, standard, or heavy duty
Pick-up head curtain lifter
Pick-up head deluge
Shop air purge, dust control system
Spark resistant skids
Stainless steel options:
Hopper:
Hopper weldment
Dump door
Inspection doors
Raker plate
High capacity dust separator
Hopper screen
Blower housing
High capacity dust separator
Hopper drain
Paint color (other than TYMCO standard white)

Special options are available for your individual requirements. Contact your local dealer or TYMCO.

CHASSIS AVAILABLE

Freightliner M2-112
Autocar Xpert
Autocar Xpert - COMDEX